



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

February 3, 2015

Norma C. Pangilinan, Ph.D.
Registrations Manager
Bayer CropScience
2 TW Alexander Drive
Research Triangle Park, NC 27709

Subject: Label Amendment – Add the Mode of Action Box and other Minor Label Revisions
Product Name: Merit 1G Greenhouse and Nursery Insecticide
EPA Registration Number: 432-1329
Application Date: 10/31/2014
Decision Number: 497423

Dear Dr. Pangilinan:

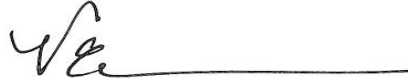
The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6. If you have any questions, please contact Jacquelyn Marchese by phone at 703-347-0559, or via email at marchese.jacquelyn@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'VE', followed by a long horizontal line.

Venus Eagle, Product Manager 01
Invertebrate & Vertebrate Branch 3
Registration Division (7505P)
Office of Pesticide Programs

Enclosure

ACCEPTED

02/03/2015

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 432-1329

GROUP**4A****Insecticide**

Merit[®] 1 G Greenhouse and Nursery Insecticide

For systemic insect control on ornamentals, non-bearing fruit and nut trees, and vegetable transplants in greenhouses, nurseries, and interior landscapes.

ACTIVE INGREDIENT:

Imidacloprid, 1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine 1.0%

OTHER INGREDIENTS: 99.0%

TOTAL: 100.0%

EPA Reg. No. 432-1329

EPA Est. No. ____

**STOP - READ THE LABEL BEFORE USE
KEEP OUT OF REACH OF CHILDREN**

CAUTION

For MEDICAL and TRANSPORTATION Emergencies ONLY Call 24 Hours A Day 1-800-334-7577
For PRODUCT USE Information Call 1-800-331-2867

FIRST AID

If in eyes:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or doctor for treatment advice.
If swallowed:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
If on skin or clothing:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15 - 20 minutes.• Call a poison control center or doctor for treatment advice.
In case of emergency call toll free the Bayer Environmental Science Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.	

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Keep children and pets off treated area until dry.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks
- Protective eye wear

Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

- When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

This product is highly toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark.

Do not contaminate water when disposing of equipment washwaters.

This chemical demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours.

Exception: If the product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks
- Protective eye wear

APPLICATION INFORMATION

Merit® 1 G Greenhouse and Nursery Insecticide is for systemic insect control on ornamentals, non-bearing fruit and nut trees, and vegetable transplants in greenhouses, nurseries, and interior landscapes. Merit 1 G Greenhouse and Nursery Insecticide is a systemic product and will be translocated upward within the plant. To assure optimum effectiveness, the product must be placed by incorporation where the roots of the plant can absorb the active ingredient. Irrigate moderately but thoroughly after application, allowing no leaching and runoff from containers for at least three irrigations or 10 days whichever is longer.

Resistance Management Recommendations

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, conform the use of this product to resistance management strategies established for the use area. Consult your Cooperative Extension Service for resistance management strategies and recommended pest management practices for your area.

For resistance management purposes, a foliar application of any chloronicotinyl insecticide following a Merit 1 G Greenhouse and Nursery Insecticide soil application in the same crop is not recommended.

Incorporation: Incorporation of Merit 1 G Greenhouse and Nursery Insecticide can be achieved by cultivation, irrigation, rainfall, mechanical placement or by using mechanical soil or media mixing equipment.

Woody Perennials: Onset of protection is slower than in herbaceous species. A delay of 2 or more weeks is expected. Longer delays may be expected with larger plants. Make application in advance of expected insect activity.

Bark Media: Media with 30% or more bark content when treated with Merit 1 G Greenhouse and Nursery Insecticide may confer a shorter period of protection.

APPLICATION TO GRASSY AREAS IN NURSERIES

Merit 1 G Greenhouse and Nursery Insecticide can be used for the control of soil inhabiting pests of grassy areas of nurseries, such as northern and southern masked chafers, *Cyclocephala borealis*, *C. immaculata*, and/or *C. lurida*; Asiatic garden beetle, *Maladera castanea*; European chafer, *Rhizotrogus majalis*; green June beetle, *Cotinis nitida*; May or June beetle, *Phyllophaga* spp.; Japanese beetle, *Popillia japonica*; Oriental beetle, *Anomala orientalis*; *Euetheola humilus rugiceps*; billbugs, *Sphenophorus* spp.; annual bluegrass weevil, *Listronotus maculicollis*; black turfgrass ataenius, *Ataenius spretulus*; *Aphodius* spp.; and mole crickets, *Scapteriscus* spp. Merit 1 G Greenhouse and Nursery Insecticide can also be used for suppression of cutworms and chinchbugs. Merit 1 G Greenhouse and Nursery Insecticide can be used as directed on nursery grass in sites such as under or around field or container grown plants, on roadways or other grassy areas in or around nurseries. Merit 1 G Greenhouse and Nursery Insecticide cannot be used on commercial sod farms.

The active ingredient in Merit 1 G Greenhouse and Nursery Insecticide has sufficient residual activity so that applications can be made preceding the egg laying activity of the target pests. High levels of control can be achieved when applications are made preceding or during the egg laying period. The need for an application can be based on historical monitoring of the site, previous records or experiences, current season adult trapping or other methods. Optimum control will be achieved when applications are made prior to egg hatch of the target pests, followed by sufficient irrigation or rainfall to move the active ingredient through the thatch.

Do not make applications when grassy areas are waterlogged or the soil is saturated with water. Adequate distribution of the active ingredient cannot be achieved when these conditions exist. The treated grassy area must be in such a condition that the rainfall or irrigation will penetrate vertically in the soil profile. Application cannot exceed a total of 40 lbs of product (0.4 lb. of active ingredient) per acre per calendar year.

DIRECTIONS FOR APPLICATIONS TO ORNAMENTALS AND VEGETABLE TRANSPLANTS.

For systemic insect control on ornamentals, non-bearing fruit and nut trees, and vegetable transplants in greenhouses, nurseries, and interior landscapes.

Ornamentals grown in flats, benches, beds and containers.

Restriction For Outdoor Use: Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

PEST	USE PATTERN	DOSAGE					REMARKS
		CONTAINER SIZE (INCHES)	BULK APPLICATION		TOPICAL APPLICATION		
			POTS/CU YD OF MIX	BULK RATE LBS/CU YD	TOPICAL RATE LEVEL TEASPOON	GRAMS/POT	
Adelgids	Herbaceous	2.0 to 3.0	4500 to 3200	7.0 to 3.5	1/8 to 1/4	0.5 to 1.0	<u>Bulk Rate Application:</u> Mix the required amount of Merit 1 G Greenhouse and Nursery Insecticide per cubic yard of medium. Mix thoroughly before filling pots and transplanting. <u>Topical Application:</u> May be made at transplanting, repotting, or on established containerized plants. Irrigate moderately after application to move the active ingredient into the root zone. Do not allow significant leaching and runoff for at least 3 irrigations or 10 days, whichever is longer.
Aphids	Species-including	3.5 to 5.0	1600 to 1300	3.9 to 3.0	1/4 to 1/3	1.0 to 1.4	
Armored scale (suppression)	vegetable	5.5 to 7.0	900 to 400	1.8 to 1.2	1/3 to 1/2	1.4 to 2.0	
Fungus gnats (larvae only) ¹	transplants ⁵	8.0 to 10.0	200 to 160	1.0 to 0.8	1/2 to 2/3	2.0 to 2.7	
	(one or two plants per pot)	11.0 to 12.0	80 to 60	0.8 to 0.5	2/3 to 1.0	2.7 to 4.1	
Japanese beetles (adults)	Herbaceous	2.0 to 3.0	4,500 to 3,200	9.0 to 7.0	1/4 of 1/3	1.0 to 1.3	For optimum control, make applications prior to egg hatch of the target pest. Irrigate moderately after application to move the active ingredient into the root zone.
Lacebugs	Species including	3.5 to 5.0	1,600 to 1,300	6.0 to 4.0	1/3 to 1/2	1.3 to 2.0	
Leaf beetles (including Elm and Viburnum leaf beetles)	vegetable	5.5 to 7.0	900 to 400	2.5 to 2.0	1/2 to 2/3	2.0 to 2.7	
	transplants ⁵	8.0 to 10.0	200 to 160	1.5 to 1.0	2/3 to 1.0	2.7 to 4.1	
	(three or more plants per pot)	11.0 to 12.0	80 to 60	1.0 to 0.8	1.0 to 1-1/2	4.1 to 6.1	
Leafhoppers (including glassy-winged sharpshooter)	Woody Perennial Species						Apply as a broadcast treatment and incorporate into the soil or media before planting. On established plants, irrigate moderately after application to move the active ingredient into the root zone. Minimize leaching and runoff for at least 3 irrigations or 10 days, whichever is longer.
Leafminers	Containerized greenhouse and nursery ornamentals, vegetable transplants ⁵ , non-bearing fruit and nut trees ⁶ and interiorscapes plants	1 Gallon	260 to 230	5.0 to 2.5	1-1/4 to 2-1/2	5 to 10	
Root Mealybugs ²		2 Gallon	125 to 100	4.4 to 2.2	2-1/2 to 5.0	10 to 20	
Psyllids		3 Gallon	70 to 60	3.3 to 1.7	3-2/3 to 7-1/3	15 to 30	
Root Weevil Complex (such as Black Vine Weevil, Apopka Weevil, Citrus Root Weevil ³)		5 Gallon	50 to 30	2.0 to 1.0	4-1/2 to 9.0	18.5 to 37	
Soft scale	Ornamental and vegetable transplants ⁵	containerized plants grown in flats, on benches, or in beds	Apply 15 ounces per 1,000 sq ft				1 level tsp of Merit 1 G Greenhouse and Nursery Insecticide = 4.1 grams 3 teaspoons =1 tablespoon
Thrips (suppression) ⁴							
Whiteflies							
White Grub larvae (such as Japanese beetle, Chafers, European chafer, Oriental beetle, Asiatic garden beetle)							
¹ Fungus gnat larvae in the soil will be controlled by incorporation. No adult Fungus Gnat control. Other foliar insect control is achieved by the uptake of Merit 1 G Greenhouse and Nursery Insecticide from a healthy root system translocating the active ingredient up into the plant.							
² Root Mealybug control will require a thorough incorporation of containerized media. Coverage is essential for control while minimizing the amount of leachate. Rate: per bulk application.							
³ Citrus Root Weevil: For use on non-bearing citrus nursery stock.							
⁴ Thrips suppression on foliage only. Thrips in buds and flowers will not be suppressed.							
⁵ Note: for use on vegetable transplants intended for resale only including: Broccoli, Chinese Broccoli, Broccoli Raab, Brussels Sprouts, Cabbage, Chinese Cabbage, Cauliflower, Collards, Eggplant, Ground Cherry, Kale, Kohlrabi, Lettuce, Mustard Greens, Pepinos, Peppers, Potatoes, Rape Greens, Sorghum, Sugarbeets, Tomatillo, and Tomato.							
⁶ Non-bearing fruit and nut trees are those trees that will not bear fruit or nuts for one year after application.							

For use only on nursery ornamentals.			
PEST	USE PATTERN	DOSAGE	REMARKS
White grub larvae (such as Japanese beetle, Masked chafers, European chafer, Oriental beetle, Asiatic garden beetle)	Field and Forest Nurseries	Apply as a uniform band on either side of row using a band six (6) inches wider than the actual root ball diameter to be dug. Do not allow bands in adjacent rows to overlap. Use 45 oz. per 1,000 ft of row or 3,000 sq ft. For grub control in areas of turf, apply as a broadcast application using 45 oz per 3,000 sq. ft.	Vegetation in the area to be treated must be mowed to a height of 3 inches or less prior to application. Mowing to the lowest possible height will insure greater consistency of control. Apply May through July. For optimum control, treatment must be followed by rainfall or irrigation.

RESTRICTIONS

Do not graze treated areas or use clippings from treated areas for feed or forage.

Do not apply to soils which are water-logged, or saturated. This condition will not allow the penetration of water into the root zone of the plants.

Do not over-irrigate or allow excessive runoff to occur following an application of Merit 1 G Greenhouse and Nursery Insecticide.

For outdoor ornamentals grown in beds or turf, applications of Merit 1 G Greenhouse and Nursery Insecticide cannot exceed a total of 40 lb per acre per calendar year.

Restriction For Outdoor Use: Do not apply this product, by any application method, to linden, basswood, or other Tilia species.

Food Crops: Treated areas may be replanted with any crop specified on an imidacloprid label, or with any crop for which a tolerance exists for the active ingredient.

For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12 month plant-back interval must be observed.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available.

Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If material is spilled for any reason or cause, carefully contain any spilled material to prevent non-target contamination. Do not walk through spilled material and dispose of as directed for pesticides above.

Refer to Precautionary Statements on label for hazards associated with the handling of this material. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer Environmental Science Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer Environmental Science Emergency Response Telephone No. is 1-800-334-7577, or contact Chemtrec at 1-800-424-9300.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of liability before using this product.

If terms are not acceptable, return the unopened product container at once. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

CONDITIONS: The directions for use of this product are believed to be adequate and must be followed carefully. However, because of manner of use and other factors beyond Bayer CropScience LP's control it is impossible for Bayer CropScience LP to eliminate all risks associated with the use of this product. As a result, crop injury or ineffectiveness is always possible. All such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No agent of Bayer CropScience is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BAYER CROPSCIENCE LP DISCLAIMS ANY liability whatsoever for special, incidental, or consequential damages resulting from the use or handling of this product.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT BAYER CROPSCIENCE LP'S ELECTION, THE REPLACEMENT OF PRODUCT.

Net Contents:

PRODUCED FOR



Bayer Environmental Science

A Division of Bayer CropScience LP
2 T. W. Alexander Drive
Research Triangle Park, NC 27709

Merit 1 G Greenhouse and Nursery Insecticide (Pending) 08/01/2014, 09/30/2014, 10/22/2014, 10/29/2014, 01/26/2015